

## AMENDMENTS TO THE CLAIMS

*Please amend the claims without prejudice or disclaimer to read as follows:*

---

(  
♡

1 (currently amended). A method of remotely maintaining a client computer having attributes and a local operating system, the method comprising the steps of:  
~~contacting~~ receiving said attributes from said client computer at a server  
computer prior to said client computer loading said local operating  
system to obtain management instructions; and  
selecting one of a plurality of management instructions for said client  
computer at said server computer, wherein said one of said plurality  
of management instructions are is selected based upon said attributes  
of said client computer; and  
providing said one of said plurality of management instructions from said  
server computer to said client computer; and to thereby allow said  
client computer to execute ~~executing~~ said one of said plurality of  
management instructions at said client computer.

2 (currently amended). The method of claim 1, wherein said step of selecting said one of  
said plurality of management instructions comprises:  
providing a configuration determination application from the server to the  
client computer prior to the receiving step;  
determining said attributes of said client computer with the configuration  
determination application; and  
providing said attributes ~~to~~ from said configuration determination application  
to said server computer; and  
~~selecting said one of said plurality of management instructions in response to~~  
~~at least one of said attributes.~~

3 (currently amended). The method of ~~claim 3~~ claim 2 wherein said attributes comprise  
hardware attributes.

4 (currently amended). The method of ~~claim 3~~ claim 2 wherein said attributes comprise  
firmware attributes.

5 (currently amended). The method of ~~claim 3~~ claim 2 wherein said attributes comprise desktop management interface (DMI) attributes.

6 (currently amended). The method of ~~claim 3~~ claim 2 wherein said attributes comprise PCI attributes.

7 (currently amended). The method of ~~claim 3~~ claim 2 wherein said attributes comprise SMBIOS attributes.

8 (currently amended). The method of ~~claim 3~~ claim 2 wherein said attributes comprise at least one of the group consisting of system manufacturer, model, motherboard type, bus information, and adapter information.

9 (currently amended). The method of ~~claim 6~~ claim 9 wherein said adapter information comprises information about adapter orientation within a system bus of said client computer.

10 (currently amended). The method of claim 1 wherein said client computer comprises a file system and wherein ~~said step of executing said management instructions~~ the method further comprises the step of verifying said file system of said client computer.

11 (original). The method of claim 10 wherein said step of verifying said file system comprises checking the files in said file system against an index file.

12 (original). The method of claim 11 wherein said index file is retained on said server computer and wherein said step of verifying said file system is executed on said server computer.

13 (original). The method of claim 11 wherein said index file is retained on said client computer and wherein said step of verifying said file system is executed on said client computer.

14 (original). The method of claim 11 wherein said index file is compressed.

15 (original). The method of claim 11 wherein files missing from said file system are retrieved from said server computer.

16 (original). The method of claim 11 wherein said index file corresponds to said attributes of said client computer.

17 (original). The method of claim 15 wherein said files are accessed using the PXE protocol.

18 (currently amended). The method of claim 1 wherein said contacting step is ~~substantially~~ in accordance with the PXE protocol.

19 (original). The method of claim 1 further comprising the step of mounting a remote drive from said server computer to said client computer.

20 (original). The method of claim 19 wherein said step of executing said management instructions comprises accessing data files on said remote drive.

21 (currently amended). The method of claim 1 wherein said client computer comprises a registry file and wherein ~~said step of managing the interaction of said server computer and said client computer~~ the method further comprises the step of verifying said registry file of said client computer.

22 (currently amended). The method of ~~claim 19~~ claim 21 wherein said step of verifying said registry file comprises checking entries in said registry file against a registry index file.

23 (currently amended). The method of ~~claim 19~~ claim 21 wherein said registry index file is retained on said server computer and wherein said step of verifying said registry file is executed on said server computer.

24 (original). The method of claim 21 wherein said registry index file is retained on said client computer and wherein said step of verifying said registry file is executed on said client computer.

25 (original). The method of claim 21 wherein said registry index file corresponds to said attributes of said client computer.

26 (original). A computer readable medium having stored thereon a plurality of data structures, said data structures comprising a plurality of a workstation objects, each of said workstation objects corresponding to one of a plurality of workstations, wherein each of said plurality of workstation objects comprises a plurality of data structures representing attributes of said one of said plurality of workstations, and wherein each of said workstation objects is associated with at least one of a plurality of template objects, wherein each of said plurality of template objects is associated with one of a plurality of event objects, wherein each of said plurality of event objects is associated with one of a plurality of script objects, and wherein each of said script objects comprises instructions to be executed by one of said plurality of workstations as part of a pre-boot sequence.

27 (original). The computer readable medium of claim 26 further comprising at least one workstation group object representing a workstation group corresponding to said plurality of workstations.

28 (original). The computer readable medium of claim 26 wherein at least one of said template objects is associated with at least one workstation group object such that

each of said plurality of workstations becomes associated with said at least one of said template objects via said at least one workstation group object.

29 (original). The computer readable medium of claim 26 wherein said at least one of said template objects is associated with at least one workstation object as a function of said attributes of said at least one workstation object.

30 (currently amended). The ~~method~~ computer readable medium of claim 29 wherein said attributes comprise hardware attributes.

31 (currently amended). The ~~method~~ computer readable medium of claim 29 wherein said attributes comprise firmware attributes.

32 (currently amended). The ~~method~~ computer readable medium of claim 29 wherein said attributes comprise desktop management interface (DMI) attributes.

33 (currently amended). The ~~method~~ computer readable medium of claim 29 wherein said attributes are PCI attributes.

34 (currently amended). The ~~method~~ computer readable medium of claim 29 wherein said attributes are SMBIOS attributes.

35 (currently amended). The ~~method~~ computer readable medium of claim 29 wherein said attributes comprise at least one of the group consisting of system manufacturer, model, motherboard type, bus information, and adapter information.

36 (currently amended). The ~~method~~ computer readable medium of claim 35 wherein said adapter information comprises information about adapter orientation within a system bus of said client computer.

37 (original). The computer readable medium of claim 30 wherein said instructions comprise scripts executed by one of said plurality of workstations.

38 (original). The computer readable medium of claim 37 wherein said scripts are REXX scripts.

39 (original). The computer readable medium of claim 37 wherein said scripts are PERL scripts.

40 (original). The computer readable medium of claim 37 wherein said scripts are batch scripts.

41 (original). The computer readable medium of claim 37 wherein each of said workstation objects are directory services objects.

42 (currently amended). A method of remotely managing a client computer comprising the steps of:

providing a ~~boot~~ configuration determination program from a server in response to a request from said client computer, said ~~boot~~ configuration determination program being configured to identify attributes of said client computer and to provide said attributes to said server;

receiving said attributes from said ~~client computer~~ configuration determination program at said server;

selecting one of a plurality of management instructions for said client computer at said server ~~in response to~~ as a function of said attributes; and

providing said one of said plurality of management instructions from said server to said client computer prior to booting said client computer.

43 (original). The method of claim 42 wherein said attributes comprise hardware attributes.

44 (original). The method of claim 43 wherein said attributes comprise firmware attributes.

45 (currently amended). The method of ~~claim 38~~ claim 42 further comprising the step of executing said one of said plurality of management instructions at said client computer.

46 (currently amended). The method of claim 45 wherein said one of said plurality of management instructions ~~comprise~~ comprises at least one of a plurality of scripts.

47 (original). The method of claim 46 wherein at least one of said plurality of scripts is a REXX script.

48 (original). The method of claim 46 wherein at least one of said plurality of scripts is a PERL script.

49 (currently amended). The method of claim 46 wherein at least ~~on~~ one of said plurality of scripts is a batch script.

50 (original). The method of claim 46 wherein each of said plurality of scripts is associated with a workstation object at said server, wherein said workstation object is associated with said client computer.

51 (original). The method of claim 46 wherein each script comprises instructions for executing one or more tasks in response to the occurrence of at least one event.

52 (original). The method of claim 51 wherein at least one of said templates is associated with said script at said server through an event object.

53 (original). The method of claim 51 wherein at least one of said templates is associated with said script at said server via a workstation group object.

54 (original). The method of claim 51 wherein at least one of said templates is associated with said script at said server via said attributes of said client computer.

55 (original). The method of claim 54 wherein said attributes comprise hardware attributes.

56 (original). The method of claim 55 wherein said attributes comprise at least one of the group consisting of manufacturer, model, motherboard type, bus information and adapter information.

57 (original). The method of claim 55 wherein said attributes comprise PCI attributes.

58 (original). The method of claim 55 wherein said attributes are DMI attributes.

59 (original). The method of claim 55 wherein said attributes are SMBIOS attributes.

60 (currently amended). The method of claim 54 wherein said providing step and said receiving step are substantially in accordance with the PXE protocol.

61 (currently amended). The method of claim 56 wherein said providing step and said receiving step are substantially in accordance with the PXE protocol.

62 (original). The method of claim 42 wherein said client computer comprises a file system and wherein said step of managing said client computer comprises verifying said file system of said client computer.

63 (original). The method of claim 62 wherein said step of verifying said file system comprises checking the files in said file system against an index file.

64 (original). The method of claim 63 wherein said index file is retained on said server computer and wherein said step of verifying said file system is executed on said server computer.



65 (original). The method of claim 63 wherein said index file is retained on said client computer and wherein said step of verifying said file system is executed on said client computer.

66 (currently amended). The method of ~~claim 67~~ claim 63 wherein said index file is compressed.

67 (original). The method of claim 63 wherein files missing from said file system are retrieved from said server computer.

68 (original). The method of claim 63 wherein said index file corresponds to said attributes of said client computer.

69 (original). The method of claim 67 wherein said files are retrieved using the PXE TFTP protocol.

70 (original). The method of claim 42 wherein said client computer comprises a registry file and wherein said step of managing said client computer comprises verifying said registry file of said client computer.

71 (original). The method of claim 70 wherein said step of verifying said registry file comprises checking entries in said registry file against a registry index file.

72 (original). The method of claim 71 wherein said registry index file is retained on said server computer and wherein said step of verifying said registry file is executed on said server computer.

73 (original). The method of claim 71 wherein said registry index file is retained on said client computer and wherein said step of verifying said registry file is executed on said client computer.

74 (original). The method of claim 71 wherein said registry index file corresponds to said attributes of said client computer.

75 (original). The method of claim 45 further comprising the step of mounting a remote volume of said server computer on said client computer.

76 (original). The method of claim 75 wherein said step of executing said management instructions comprises accessing files stored on said remote volume.

77 (original). The method of claim 76 wherein said client computer comprises a file system and wherein said step of managing said client computer comprises verifying said file system of said client computer.

78 (original). The method of claim 77 wherein files missing from said file system are retrieved from said remote volume.

79 (original). The method of claim 76 wherein said step of verifying said file system comprises checking the files in said file system against an index file.

80 (original). A computer readable medium having instructions stored thereon for executing the method of claim 42.

81 (original). A computer readable medium having instructions stored thereon for executing the method of claim 44.

82 (original). A computer readable medium having instructions stored thereon for executing the method of claim 49.

83 (original). A computer readable medium having instructions stored thereon for executing the method of claim 56.

84 (original). A computer readable medium having instructions stored thereon for executing the method of claim 57.

85 (original). A computer readable medium having instructions stored thereon for executing the method of claim 59.

86 (original). A computer readable medium having instructions stored thereon for executing the method of claim 68.

87 (original). A computer readable medium having instructions stored thereon for executing the method of claim 70.

88 (original). A computer readable medium having instructions stored thereon for executing the method of claim 74.

89 (original). A computer readable medium having instructions stored thereon for executing the method of claim 76.

90 (currently amended). A system for managing a plurality of client computers over a network, the system comprising:

a database configured to store ~~records~~ a plurality of records of information, each of said plurality of records corresponding to about one of said plurality of client computers;

a server application configured to receive a request ~~requests~~ from one of said plurality of client computers via said network and to associate said ~~requests~~ request with said ~~records~~ record corresponding to said one of said client computers based upon attributes of the one of said plurality of client computers; and

a plurality of configuration scripts each comprising instructions to be executed by at least one of said plurality of client computers, wherein one of said plurality of configuration scripts are identified by the record corresponding to provided to said one of said plurality of client

computers is provided to said one of said plurality of client computers  
via said network by said server application in response to said  
~~requests request and in accordance with said records of information in~~  
~~said database.~~

91 (original). The system of claim 90 wherein said database is a directory services application.

92 (original). The system of claim 90 wherein said records of information comprise template objects associated with each of said client computers.

93 (original). The system of claim 92 wherein said records of information further comprise event objects associated with said template objects, wherein said event objects are associated with said configuration scripts such that said instructions are provided to said client computers upon the occurrence of an event.

94 (original). The system of claim 93 wherein said event comprises the booting of one of said client computers.

95 (original). The system of claim 93 wherein said database is a directory services application.

96 (currently amended). The system of claim 95 wherein said directory services application is a Netware Directory Services directory.

97 (currently amended). The system of claim 95 wherein said directory services application is a Microsoft Active Directory directory.

98 (original). The system of claim 90 wherein said records of information comprise attributes of said client computers.

99 (original). The system of claim 98 wherein said attributes comprise DMI attributes.

100 (original). The system of claim 98 wherein said attributes comprise PCI attributes.

101 (original). The system of claim 98 wherein said attributes comprise SMBIOS attributes.

102 (currently amended). A system for managing a plurality of client computers over a network, the system comprising:

a directory services application configured to store objects associated with each of said plurality of client computers;

a plurality of configuration scripts each comprising instructions to be executed by one of said client computers;

an interface configured to allow an administrator to select ~~a script~~ one of the plurality of configuration scripts to be executed by one of said plurality of client computers upon the occurrence of an event; and

a server application configured to provide said selected script to said one of the plurality of client ~~computer~~ computers via said network in response to said occurrence of said event.

103 (original). The system of claim 102 wherein said event is associated to said one of said client computers by a template object in said directory services application.

104 (original). The system of claim 102 wherein at least two of said client computers are associated in said directory services application by a workstation group object.

105 (currently amended). A system for administrating a plurality of client computers over a network, the system comprising:

means for receiving a boot ~~messages~~ message from one of said plurality of client computers;

means for recognizing said one of said plurality of client computers from said boot ~~messages~~ message;

means for associating said boot ~~messages~~ message with ~~entries~~ an entry in a database to determine administration steps to be performed on said one of said plurality of client computers; and  
means for providing said administrative steps to said one of said plurality of client computers in response to said boot messages.

106 (currently amended). The system of claim 105 further comprising means for determining attributes of one of said plurality of client computers.

107 (currently amended). The system of claim 106 wherein said determining means comprises means for querying hardware and software attributes of one of said plurality of client computers.

108 (currently amended). The system of claim 107 wherein said querying means comprises means for querying DMI parameters of one of said plurality of client computers.

109 (currently amended). The system of claim 107 wherein said querying means comprises means for querying PCI parameters of one of said plurality of client computers.

110 (currently amended). The system of claim 107 wherein said querying means comprises means for querying SMBIOS parameters of one of said plurality of client computers.

111 (original). A method of maintaining files on a client computer comprising the steps of:

receiving a boot request at a server computer from said client computer;  
providing a response to said boot request from said server to said client,  
wherein said response comprises a file checking program configured to be executed on said client computer;  
receiving an index of files on said client computer from said file checking program;  
providing updated files from said server to said client computer based upon said index.

112 (original). The method of claim 111 comprising the step of mounting a volume of said server to said client computer.

113 (original). The method of claim 112 wherein said volume is mounted via a network stack located in a ROM on said client computer.

114 (original). The method of claim 113 wherein said ROM is a ROM on a network interface card of said client computer.

115 (original). The method of claim 114 wherein said ROM is a PXE-enabled ROM.

B 116 (currently amended). A method of maintaining a registry on a client computer comprising the steps of:

receiving a boot request at a server computer from said client computer;  
providing a registry checking program to the client computer in response to  
said boot request ~~from said server to said client~~, wherein said  
~~response comprises a~~ registry checking program is configured to be  
~~executed~~ check said registry on said client computer and to provide a  
registry response to said server computer;  
receiving said registry ~~program~~ response at said server from said registry  
checking program;  
processing-~~verifying~~ said registry response at said server to verify said  
registry on said client computer; and  
providing an updated registry from said server to said client computer in  
response to said processing step.

---